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Title: Foraging Behaviour of naïve grey seal (Halichoerus grypus) pups

Category: Ecology

**Student**: Not Applicable

**Preferred Format**: Poster Presentation

**Abstract**: Like the weanlings of many phocid seals, grey seal pups vary widely in body mass and composition. After weaning, they undergo a period of fasting but must enter the sea to feed while they still have adequate fuel stores to sustain them until they begin to forage effectively. They depart the breeding site without apparent guidance from their mother or other experienced seals. Their foraging capability and the time they can subsist without food will depend on the fat and protein reserves they have when they leave the beach.

We examined the movements and diving behaviour of 20 pups in the largest and smallest quartiles of weaned mass in the 2001 and 2002 cohorts at the Isle of May, Scotland. The mass and body composition of each pup was measured near weaning and departure. Just prior to their departure, the pups were equipped with Satellite Relay Data Loggers made by SMRU that could provide location and behaviour information for up to a year after departure.

Pups ranged over a large fraction of the North Sea up to>800 km from their natal site. Initially pups wandered widely and, unlike adults, showed little repetitive geographic pattern until typically several months after departure. The pups from which we obtained the longest duration tracks tended to fall into repetitive patterns of movement and maintained these for the duration of tracking. Like adult grey seals, pups tended to dive to near the bottom in all but the deepest parts of the North Sea suggesting benthic foraging. Even the smallest pups were able to dive to depths of over 250 m, enabling access to the bottom over most of their range. There were few clear differences in the duration of tracking or the dive performance between large and small pups suggesting that chance may play a significant role in determining survival.